

ABSTRACT OF THE DISCLOSURE

5 An automatic gain controller (AGC) and method for use in a digital TV receiver having an IF
amplifier, an RF amplifier, an analog to digital converter (ADC) connected to the IF
amplifier, and a demodulator connected to the ADC, the AGC comprising: an input selector
for selecting as feedback signal one of a digitized IF signal output of the ADC and a
demodulated signal output of the demodulator; a signal detection unit for detecting the
10 conditions of the feedback signal and outputting status signals; and a traffic controller for
receiving the status signals and outputting control signals based on the status signals to an IF
gain controller and an RF gain controller for independent gain control of the RF amplifier
and the IF amplifier. The AGC and method further including hysteresis-curve-based
switching for alternatively halting adjustments to IF gain while adjusting RF gain or halting
15 adjustments to RF gain while adjusting IF gain.